## **OWNER'S GUIDE**

### HAYWARD SELF-PRIMING

# Super™ Pump - SP2600 Series Super II™ Pump - SP3000 Series Max-Flo™ Pump - SP2800 Series INSTALLATION AND **OPERATING INSTRUCTIONS**

Your Hayward self-priming centrifugal pump has been quality-built and engineered to give you many years of efficient, dependable, corrosionfree service.

The advanced design reduces operation and maintenance to simple, common-sense procedures.

#### **GENERAL TIPS ON PUMP INSTALLATION**

Locate the pump as close to pool as practical and run suction line as direct as possible. This cuts down on friction loss through pipe and fittings.

Never overtighten pipe connections—use only pipe sealants formulated specifically for plastics, i.e., Teflon tape, Permatex No. 2, etc.

Suction line should have continuous slope from lowest point in line. Make sure suction joints are tight. Suction pipe should be as large or larger than discharge pipe.

Damp, non-ventilated locations should be avoided. Motors require free circulation of air to aid in cooling.

Insure that the electrical supply available agrees with motor's voltage and is 50 HZ, and that wire size is adequate for the KW rating and distance from power source. Motor must always be properly earthed. Electrical circuits must be supplied through a Residual Current Device -RCD (safety switch), with a rated residual operating current of 30mA. All electrical wiring must be performed by qualified electrical contractor, and must conform to electrical regulations and AS3000 wiring rules.

#### STARTING AND PRIMING INSTRUCTIONS

Fill strainer/housing with water to suction pipe level. Never operate the pump without water. Water acts as a coolant and lubricant for the mechanical shaft seal.

Open all suction and discharge lines and valves, as well as air bleed (if available) on filter. (The air that is to be displaced from the suction line must have some place to go.)

CAUTION: All suction and discharge valves must be open when starting the system. Failure to do so could cause severe personal injury and/or property damage.

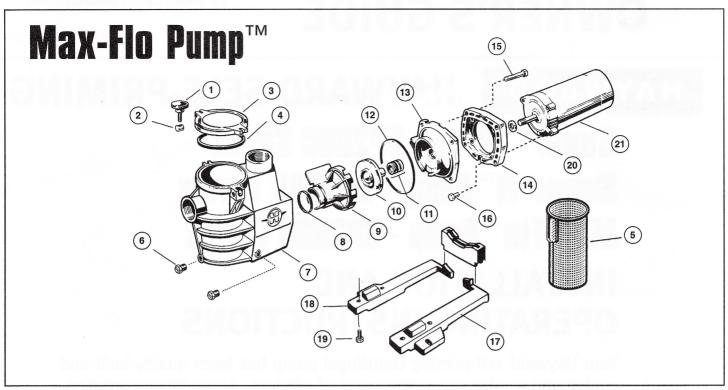
Turn on power and allow a reasonable time for priming. Five minutes is not unreasonable. (Priming time depends on suction lift and horizontal length of suction piping.) If the pump will not start, or will not prime, see TROUBLE SHOOTING GUIDE on back page.

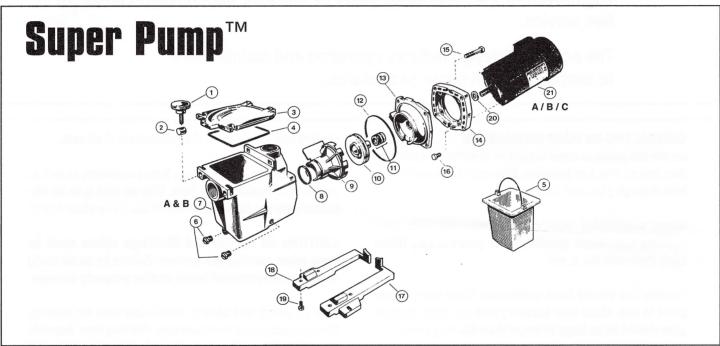
#### Special Notice for 415V. 3 Phase Models

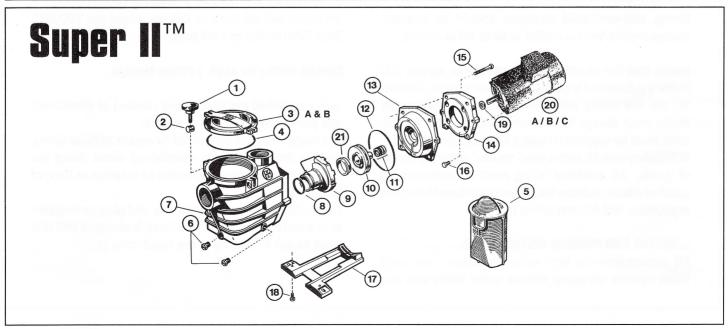
Only a qualified electrician may connect or disconnect this pump to/from a power supply.

The motor must be connected by means of fixed wiring so that the IP rating is maintained when doing so. Electrician must check direction of rotation at time of installation.

The motor is not suitable for flex and plug connection as starter/contactor with overload is required and this must be set according to the rated current.







	PART NUMBER			
NO. REQ'D.	MODEL SP-2807MA	MODEL SP-2810MA	MODEL SP-2815MA	
2	SPX1600-P	SPX1600-P	SPX1600-P	
2	SPX1600-N	SPX1600-N	SPX1600-N	
1	SPX1250-LA	SPX1250-LA	SPX1250-LA	
1	SPXo125-T	SPXo125-T	SPX0125-T	
1	SPX2800-M	SPX2800-M	SPX2800-M	
2	SPX1700-FG	SPX1700-FG	SPX1700-FG	
1	SPX2800-A	SPX2800-A	SPX2800-A	
1	SPX1600-R	SPX1600-R	SPX1600-R	
1	SPX2800-B	SPX2800-B	SPX2800-B	
1	SPX2607-C	SPX2610-C	SPX2615-C	
1	SPX1600-Z-2	SPX1600-Z-2	SPX1600-Z-2	
1	SPX1600-T	SPX1600-T	SPX1600-T	
1	SPX2600-E	SPX2600-E	SPX2600-E	
1	SPX1600-F	SPX1600-F	SPX1600-F	
4	SPX1600-Z-4	SPX1600-Z-4	SPX1600-Z-4	
4	SPX125-Z-4	SPX125-Z-4	SPX125-Z-4	
1	SPX1600-G	SPX1600-G	SPX1600-G	
1	SPX1600-J	SPX1600-J	SPX1600 J	
4	SPX1600-Z-5	SPX1600-Z 5	SPX1600-Z-5	
1	SPX125-F	SPX125-F	SPX125-F	
1	SPX2807MAMTR	SPX2810MAMTR	SPX2815MAMTR	
_			1 SPX2807MAMTR SPX2810MAMTR	

REF.	DESCRIPTION		PART NUMBER					
		NO. REQ'D.	MODEL SP-2607MA	MODEL SP-2610MA	MODEL SP-2610MA	MODEL SP-1621AD		
			SP-2607AD	SP-2610AD	SP-2615AD	SP-1621HD		
			SP-2607HD	SP-2610HD	SP-2615HD			
1	Hand Knob	2	SPX1600-P	SPX1600-P	SPX1600-P	SPX1600-P		
2	Swivel Nut	2	SPX1600-N	SPX1600-N	SPX1600-N	SPX1600-N		
3	Strainer Cover	1	SPX1600-D	SPX1600-D	SPX1600-D	SPX1600-D		
4	Strainer Cover Gasket	1	SPX1600-S	SPX1600-S	SPX1600-S	SPX1600-S		
5	Basket	1	SPX1600-M	SPX1600-M	SPX1600-M	SPX1600-M		
6	Drain Plug & Gasket	2	SPX1700-FG	SPX1700-FG	SPX1700-FG	SPX1700-FG		
7	Pump Housing/Strainer	1	SPX1620-A	SPX1620-A	SPX1620-A	SPX1620-A		
8	Diffuser Gasket	1	SPX1600-R	SPX1600-R	SPX1600-R	SPX1600-R		
9	Diffuser	1	SPX2600-B	SPX2600-B	SPX2600-B	SPX1616-B		
10	Impeller	1	SPX2607-C	SPX2610-C	SPX2615-C	SPX1621-C		
11	Seal Assembly	1	SPX1600-Z-2	SPX1600-Z-2	SPX1600-Z-2	SPX1600-Z-2		
12	Housing Gasket	1	SPX1600-T	SPX1600-T	SPX1600-T	SPX1600-T		
13	Seal Plate	1	SPX2600-E	SPX2600-E	SPX2600-E	SPX1611-E		
14	Motor Mounting Plate	1	SPX1600-F	SPX1600-F	SPX1600-F	SPX1600-F		
15	Housing Cap Screw	4	SPX1600-Z-4	SPX1600-Z-4	SPX1600-Z-4	SPX1600-Z-4		
16	Motor Cap Screw	4	SPX125-Z-4	SPX125-Z-4	SPX125-Z-4	SPX125-Z-4		
17	Mounting Foot (Left)	1	SPX1600-G	SPX1600-G	SPX1600-G	SPX1600-G		
18	Mounting Foot (Right)	1	SPX1600-J	SPX1600-J	SPX1600 J	SPX1600 J		
19	Mounting Foot Cap Screw	4	SPX1600-Z-5	SPX1600-Z 5	SPX1600-Z-5	SPX1600-Z-5		
20	Slinger	1	SPX125-F	SPX125-F	SPX125-F	SPX125-F		
21a	Motor—50 HZ Single Phase (AD)	1	SPX2607ADMTR	SPX2610ADMTR	SPX2615ADMTR	SPX1621ADMTR		
21b	Motor—50 HZ Single Phase (MA)	1	SPX2607HDMTR	SPX2610MAMTR	SPX2615MAMTR	N/A		
210	Motor—50 HZ Single Phase (HD)	1	SPX2607HDMTR	SPX2610HDMTR	SPX2615HDMTR	SPX1621HDMTR		

REF. NO.	DESCRIPTION	NO. REQ'D.	PART NUMBER						
			MODEL SP3007AD	MODEL SP3010AD	MODEL SP3016AD	MODEL SP3021AD	MODEL SP3026AD		
				SP3010HD	SP3016HD	SP3021HD	SP3026HD		
					SP3016HD3	SP3021HD3	SP3026HD3		
1	Hand Knob	2	SPX1600-P	SPX1600-P	SPX1600-P	SPX1600-P	SPX1600-P		
2	Swivel Nut	2	SPX1600-N	SPX1600-N	SPX1600-N	SPX1600-N	SPX1600-N		
за	Strainer Cover	1	SPX3000-D	SPX3000-D	SPX3000-D	SPX3000-D	SPX3000-D		
3b	Strainer Cover - screw in style	1	SPX3100-D	SPX3100-D	SPX3100-D	SPX3100-D	SPX3100-D		
4	Strainer Cover O-Ring	1	SPX3000-S	SPX3000-S	SPX3000-S	SPX3000-S	SPX3000-S		
5	Basket	1	SPX3000-M	SPX3000-M	SPX3000-M	SPX3000-M	SPX3000-M		
6	Drain Plug	2	SPX1700-FG	SPX1700-FG	SPX1700-FG	SPX1700-FG	SPX1700-FG		
7a	Pump Housing/Strainer	1	SPX3000-AA	SPX3000-AA	SPX3000-AA	SPX3020-AA	SPX3020-AA		
7b	Pump Housing/Strainer - screw in lid	1	SPX3210-A	SPX3210-A	SPX3210-A	SPX3210-A	SPX3210-A		
8	Diffuser Gasket	1	SPX1600-R	SPX1600-R	SPX1600-R	SPX1600-R	SPX1600-R		
9	Diffuser	1	SPX3000-BN	SPX3000-BN	SPX3021-B	SPX3021-B	SPX3021-B		
10	Impeller	1	SPX3007-C	SPX3010-C	SPX3016-C	SPX3021-C	SPX3026-C		
11	Seal Assembly	1	SPX1600-Z-2	SPX1600-Z-2	SPX1600-Z-2	SPX1600-Z-2	SPX1600-Z-2		
12	Housing Gasket	1	SPX3000-T	SPX3000-T	SPX3000-T	SPX3000-T	SPX3000-T		
13	Seal Plate	1	SPX3020-E	SPX3020-E	SPX3020-E	SPX3020-E	SPX3020-E		
14	Motor Mounting Plate	1	SPX3000-F	SPX3000-F	SPX3000-F	SPX3000-F	SPX3000-F		
15	Housing Cap Screw	6	SPX1600-Z-4	SPX1600-Z-4	SPX1600-Z-4	SPX1600-Z-4	SPX1600-Z-4		
16	Motor Cap Screw	4	SPX125-Z-4	SPX125-Z-4	SPX125-Z-4	SPX125-Z-4	SPX125-Z-4		
17	Mounting Bracket	1	SPX3000-G	SPX3000-G	SPX3000-G	SPX3000-G	SPX3000-G		
18	Mounting Bracket Screw	2	SPX1600-Z-5	SPX1600-Z-5	SPX1600-Z-5	SPX1600-Z-5	SPX1600-Z-5		
19	Slinger	1	SPX125-F	SPX125-F	SPX125-F	SPX125-F	SPX125-F		
20a	Motor—50 HZ Single Phase (AD)	1	SPX3007ADMTR	SPX3010ADMTR	SPX3016ADMTR	SPX3021ADMTR	SPX3026ADMTR		
20b	Motor—50 HZ Single Phase (HD)	1	SPX3007HDMTR	SPX3010HDMTR	SPX3016HDMTR	SPX3021HDMTR	SPX3026HDMTR		
200	Motor—50 HZ, 415V Three Phase	1	N/A	N/A	SPX3016HD3MTR	SPX3021HD3MTR	SPX3026HD3MTR		
21	Impeller Ring	1	SPX3005-R	SPX3005-R	SPX3021-R	SPX3021-R	SPX3021-R		

#### **MAINTENANCE**

- 1. Clean strainer basket regularly. Do not strike basket to clean.
- 2. Inspect strainer cover O-ring regularly and replace as necessary. Keep cover O-ring lubricated.
- 3. Hayward pumps have self-lubricating motor bearings and shaft seals. No lubrication is necessary.
- 4. Keep motor clean. Insure air vents are free from obstruction.

NB Do not use petroleum based lubricants on gaskets, O-rings or plastic components. Use only silicone based lubricants.

#### A. MOTOR WON'T START

- 1. Check open switches or relays, blown circuit breakers or fuses.
- 2. Ensure power cord is plugged in and power is switched on, (240v Models Only).
- 3. Refer to Authorised Service Agent or other qualified person.

#### **B. MOTOR CUTS OUT**

NOTE: Your Hayward pump motor is equipped with Automatic Thermal Overload Protection. The motor will automatically shut-off, under normal conditions, before heat damage buildup, due to an improper operating condition, can occur. The motor will auto-restart when safe heat level is reached.

If motor fails to restart switch power off and contact an authorised Hayward Pump Service Technician or other qualified service company.

### C. MOTOR HUMS, BUT DOES NOT START

If motor fails to start switch power off and contact an authorised Hayward Pump Service Technician or other qualified service company.

#### D. PUMP WON'T PRIME

 Make sure pump/strainer is filled with water, and that cover gasket is clean and properly seated. Tighten hand nuts. 2. Make sure all suction and discharge valves are open and unobstructed, and that pool water level is above all suction openings.

#### E. LOW FLOW — Generally, check for:

- 1. Clogged or restricted strainer or suction line;
- 2. Plugged or restricted discharge line of filter (high discharge gauge reading).
- 3. Air leak in suction (bubbles issuing from return fittings).

#### F. NOISY PUMP—Check for:

- 1. Air leak in suction causing rumbling in pump.
- 2. Cavitation due to restricted or undersized suction line and restricted discharge lines.
- 3. Vibration due to improper mounting, etc.
- 4. Foreign matter in pump housing.
- Motor bearings made unserviceable by wear, rust, or continual overheating. Refer to authorised service agent.

#### **SERVICE & REPAIRS**

Consult your local authorised Hayward dealer or service center. No pumps or motors may be returned directly to the factory without the expressed written authorisation of Lincoln Pool Products Pty. Ltd. (Ph.) 03 9792 2325

#### Warning

The Pump Motor is an electrical device and as such should not be disassembled or serviced by anyone other than an authorised Hayward Service Technician or qualified Electrical Service Company. An experienced Pool Service Technician should attend to any other problems that cannot be corrected by routine maintenance.



#### Lincoln Pool Products Pty. Ltd.

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